

REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are requested.

By the current Amendment, claims 1-16 have been cancelled and claims 17-32 have been added.

In view of the Examiner's requirement for a new title, the following title is provided --APPARATUS FOR HOLDING AND MOUNTING A COMPONENT--.

With regard to new claims 17-32, claims 17-24 correspond to the elected species, and it is respectfully submitted that claims 25-32 should not be restricted from claims 17-24 either being drawn to a different invention or species, because the only difference between these groups of claims is their preamble. In this regard, the structural features of claim 17 relied upon for patentability are identical to the structural features of claim 24 relied upon for patentability, whereby it is respectfully submitted that claim 17 cannot be restricted from claim 24 either as being drawn to a different invention or species. Accordingly, it is respectfully submitted that claims 25-32 should be examined along with claims 17-24.

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted prior art as depicted in Figures 14-16, and claim 2 was indicated by the Examiner to be allowable if rewritten in independent form. The indication of allowable subject matter is greatly appreciated; however, for reasons to follow claim 2 has not been rewritten in independent form because it is believed that claim 1, and new claim 17, are allowable over Applicants' admitted prior art. Please note that new claim 17 basically corresponds to former claim 1 and new claim 18 basically corresponds to former claim 2.

The basic position taken by the Examiner in rejecting claim 1 is that the use of a second blow device would have been obvious as a matter of design choice to one having ordinary skill in the art, because one would have found it obvious to choose any desired number of blow devices since Applicants have not disclosed that the additional blow device is critical, and since the apparatus would perform equally well with a single blow device as taught by the prior art as with two blow devices as taught by the instant invention. This position taken by the Examiner is respectfully traversed for the following reasons.

As shown in Fig. 14 (prior art), the blow device (first blow device) is connected at an end part of the shaft that is opposed to the end of the shaft at which is disposed the nozzle that is to suck an electronic component. Thus, it takes long time to return an interior of the nozzle to atmospheric pressure for releasing the component from the nozzle once the blow device is activated. Specifically, becomes long is a time period during which the nozzle holds the component on the circuit board. Therefore, results is a problem in that the time required for mounting the component onto the circuit board becomes longer.

However, if the blow device is activated earlier than usual, i.e. while the nozzle holding the component is descending toward the circuit board, in order to shorten the time required for mounting, then the interior of the nozzle could be returned to atmospheric pressure at a time such that the component would be blown from the nozzle before the component is perfectly placed on the circuit board. This results in a mounting condition of the component becoming unpredictable and unstable.

The present invention has been developed to solve the above problems. Specifically, the second blow device is added near the end portion of the shaft at which the nozzle is positioned. Accordingly, a short time is required for returning the interior of the nozzle to atmospheric pressure such that mounting time is shortened relative to that of the prior art without causing an unpredictable and unstable mounting state.


In view of the above, while the Examiner may be correct in asserting that addition of a second blow device, without more, would have been obvious to one having ordinary skill in the art, claim 17 requires more. In this regard, claim 17 requires the location of this second blow device, i.e. **near the end of the shaft at which the nozzle is located**, and it is this location that leads to the above-described improvement over the apparatus as depicted in Figures 14-16. Thus, it is respectfully submitted that claim 17, and claim 25, are allowable over Applicants' admitted prior art as depicted in Figures 14-16, whereby claims 18-24 and 26-32 are also allowable.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicants' undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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